

SURGICAL KIT WITH MULTIPLE PLANAR RECESS SURFACES

BACKGROUND

[0001] The present invention relates to pre-packaged surgical kits in general, and more particularly to surgical kits for percutaneous endoscopic procedures.

[0002] Various medical procedures are simplified by providing the physician with a kit that contains the majority, if not all, of the necessary medical articles that the physician will need to complete a particular procedure. Kits may include articles such as, for example, drapes, syringes, scalpels, needles, clamps, gauze, sponges, drugs, sutures, and devices. Such kits are commonly provided for procedures such as, for example, percutaneous endoscopic gastrostomy ("PEG") and laparoscopic jejunostomy. These kits reduce the time spent by hospital personnel gathering the appropriate articles that are required for a particular procedure and ensure that the surgeon has each article at hand at the appropriate point in the procedure.

[0003] While many current surgical kits include the necessary medical implements or articles to complete a particular procedure, the articles in such kits may not be arranged in the most effective and efficient manner within the kits.

[0004] Also, conventional kits provide not only the surgical implements, such as scalpels, needles, scissors, and the like, but also "accessory" items such as swabs, gauze pads, single-use packages of ointments and lubricants, suture strands, sponges, and the like. These relatively small, loose, items are, however, relatively difficult to store in the kits. Such items may be simply placed loosely in the kit or provided in a sealed pouch. Once the kits or pouches are opened, these items tend to clutter the kit or are moved out of the kit to various locations by the surgical staff. It is difficult to maintain accountability of the items. Also, the accessory items are generally single-use disposable items and conventional kits do not provide a means for accountability and disposal of the devices after use.

SUMMARY

[0005] Objects and advantages of the invention will be set forth in part in the following description, or may be obvious from the description, or may be learned through practice of the invention.

[0006] The present invention provides a surgical kit of the type wherein the contents of the kit include surgical articles and accessory items to be used in performing a particular type of surgery. An example of such a kit is a percutaneous endoscopic gastrostomy (PEG) kit. It should be appreciated, however, that kits according to the present invention are not limited to any particular set of contents or any particular surgical procedure. The teachings of the present invention are beneficial for any pre-packaged surgical kit.

[0007] An embodiment of a surgical kit according to the invention includes a tray having a plurality of recesses formed therein for receiving surgical articles or implements useful in performing a particular surgical procedure. The terms surgical "articles" or "implements" are intended to encompass any combination of devices used in a surgical procedure and may include, without limitation, scissors, clamps, forceps, medicines and drugs, syringes, needles,

tubes, scalpels, snares, cannulas, and so forth. Particular types of procedures require specific surgical articles, as is well understood by those skilled in the art. For example, a PEG kit may also include a "push" or "pull" assembly, a bolus adapter assembly, locking ring, snare device, etc.

[0008] The kit may also include any combination of "accessory" surgical items. The term "accessory" item is meant to encompass generally loose ancillary articles such as any number of pre-packaged single-use disposable items. Such items may include, for example, sutures, swabs, ointment packages, lubricant packages, drapes, gauze pads, small vials or packages of drugs, and the like. In this regard, the kit according to the invention may include an accessory item container received in a container recess defined in the tray. The accessory items may be placed in a separate container which is then placed in the tray prior to sealing the tray. The container may be seated in a respective recess defined in the tray.

[0009] The tray generally includes a cover that is sealed thereto, for example by an adhesive around a peripheral edge of the tray. In order to gain access to the contents of the tray, the cover is peeled or removed from the tray.

[0010] The tray includes a plurality of planar surfaces formed therein. The plurality of recesses are defined in the planar surfaces. The planar surfaces are offset vertically such that each planar surface is offset with respect to at least one other planar surface. In this manner, unobstructed access to certain of the recesses in at least one of the lower planar surfaces is obtained by removing articles from recesses in at least one upper planar surface. In particular embodiments, a first planar surface, a second planar surface and a third planar surface may be provided in the tray. The second planar surface may be offset from the first planar surface. The third planar surface may be offset from the first planar surface.

[0011] A particular embodiment of a surgical kit according to the invention is a PEG kit wherein each recess is adapted to hold an article that is useful in performing a percutaneous endoscopic gastrostomy. At least one of the recesses may be adapted to retain at least a portion of a percutaneous endoscopic gastrostomy tube. In some embodiments, such a recess may be disposed on the second planar surface. A retrieval snare and/or a guide wire may be positioned over at least a portion of the percutaneous endoscopic gastrostomy tube. One of the recesses may be adapted to retain a looped placement wire. In particular embodiments, such a recess may be disposed on the first surface. One of the recesses may be adapted to retain an exterior tube retention device, and such a recess may be disposed on the second planar surface in some embodiments. Another of the recesses may be adapted to retain an introducer cannula, and such a recess may be disposed in the third planar surface.

[0012] Some of the planar surfaces may have one or more bosses extending upwardly therefrom. In some embodiments, at least one boss may extend upwardly from the second planar surface. At least one boss may be disposed upon the first planar surface. An article may be positioned so that at least a portion of such an article is disposed about a boss.

[0013] The invention will be explained below in further detail by way of reference to an embodiment of the invention illustrated in the figures.